WHY SHOULD THE FERRY DOCK IN HYDER?

1. Benefits to ferry system

a. Reliable, affordable connection to the mainland from the southern end of the panhandle.
b. Dock and terminal on US soil. No foreign land lease or millions spent to repair an ageing facility on foreign land.
c. All aspects of permitting, construction, and operation controlled by State of Alaska /AMHS.
    * Jobs for Alaskans in constructing and operating a modest ferry terminal.

2. Benefits to general public. *Please refer to a map that includes southeast Alaska and British Columbia.*

a. Affordable and easy access to summer and winter recreation in Hyder and all points beyond: Canada, Alaska, and Lower 48.
    *Southbound: The highway from Hyder (37A - 37) and the highway from Prince Rupert converge at Kitwanga, BC. The distance for the 2 routes is virtually the same. Both routes are paved, 2-lane, and maintained year-round.
    *Northbound: Travel to Anchorage and other points north is 250 miles shorter from Hyder than from Prince Rupert.
b. Tourist access to the Panhandle. With the resumption of travel thru Canada, next summer should bring the usual 20,000 – 30,000 visitors for bear viewing, birding, photography, etc.
    * Nearly 100% of our tourists are independent highway travelers. Hyder is now a highway dead end; ferry service would provide a convenient gateway to exploring Southeast Alaska.

3. Present opportunity

a. The Army Corps of Engineers (ACOE) is interested in extending our dock out to deep water, and also constructing breakwaters to reduce harbor siltation rate.

They will proceed with a feasibility study when the State finds the required matching funds.

b. If AMHS shows interest in a Hyder ferry port, ACOE could keep the requirements in mind when going forward with the feasibility study.

4. Benefits to Hyder

a. Reliable link between Hyder and the rest of Southeast. We have no reliable access to Ketchikan. Medical services and airport access become critical at times. With the shutdown of the Prince Rupert terminal (300 highway miles from Hyder) and its tenuous re-opening, we have only small plane transportation which is prone to weather cancellations and delays – sometimes up to 3 weeks.

b. A revived economy. Much of our small population (76 people) relies on tourism for their livelihood. The pandemic closed all our small businesses; only 3 are able to re-open. Both hotels are closed and for sale. Hyder has several existing and potential business opportunities for Alaskans.

c. State money invested in *an Alaskan community that would truly appreciate being part of the AMHS system.*

Post Office Box 149
Hyder, Alaska 99923
Phone: (250) 636-9148

Hyder Community Association

In Canada reply to:
Post Office Box 861
Stewart, B.C
VOT 1W0.

RESOLUTION

NO. 02-22 JANUARY 17, 2022

A RESOLUTION REQUESTING THE ALASKA MARINE HIGHWAY TO RELOCATE THE SOUTHERN PANHANDLE TERMINUS TO HYDER ALASKA

WHEREAS The Hyder Community Association represents and exists for the betterment of the unincorporated community of Hyder, Alaska, and;

WHEREAS our harbor is a State-owned facility that is an important part of our infrastructure, and our only link to the rest of Alaska, and;

WHEREAS a Marine Highway dock in Hyder, Alaska would enable the elimination of a foreign land lease, and millions spent on expensive repairs for an aging facility that benefits only Canadians, and;

WHEREAS developing a docking facility in Hyder, Alaska provides that all aspects of permitting, construction and operation are controlled by the State of Alaska/ AMHS, and;

WHEREAS development of a Hyder dock provides jobs for Alaskans and benefits the businesses and residents of Hyder, Alaska, and;

WHEREAS The Army Corp of Engineers is currently interested in extending our dock out to deep water and constructing a rock rubble breakwater to reduce harbor siltation, and;

Resolution 02-22 Relocate Southern Panhandle Ferry Terminus to Hyder Alaska

WHEREAS This is an opportune time for AMHS to coordinate the requirements for an Alaska ferry docking facility with the planned Corp of Engineers improvements.

NOW THEREFORE BE IT RESOLVED That the Hyder Community Association request the State of Alaska / AMHS to relocate the southern panhandle terminus of the Alaska Marine Highway System to Hyder, Alaska.

ADOPTED BY the Hyder Community Association General Membership on January 17, 2022.

Vote: 9 yea 0 nay

Witness Carolin Stewart VP
for Paul M Larkin, President

Attest: Carol Denton
Carol Denton, Secretary

file copy

Post Office Box 149
Hyder, Alaska 99923
Phone: (250) 636-9148

Hyder Community Association

In Canada reply to:
Post Office Box 861
Stewart, B.C.
VOT 1W0.

RESOLUTION

NO. 03-22 FEBRUARY 01, 2022

A RESOLUTION REQUESTING FUNDING FOR A FEASIBILITY STUDY FOR THE REDESIGN OF THE HYDER SMALL BOAT HARBOR IN COOPERATION WITH THE ARMY CORP OF ENGINEERS

WHERAS The Hyder Community Association represents and exists for the betterment of the unincorporated community of Hyder, Alaska, and;

WHEREAS Our harbor is a State-owned facility that is an important part of our infrastructure, and our only link to the rest of Alaska, and;

WHEREAS Alaska DOT&PF is not able to fund the maintenance required for Hyder Small boat Harbor, and;

WHEREAS The Army Corps of Engineers (ACOE) has determined there is a federal interest in the Hyder Harbor

and has proposed a feasibility study for the redesign of the harbor, and;

WHERAS This determination of Federal interest could result in the transfer of jurisdiction and maintenance responsibility for the Hyder Harbor from the Alaska DOT&PF to the COE.

WHEREAS The Army COE is now ready to proceed with the Feasibility Study / Project Design once a local match of $700,000 is identified.

WHEREAS The State of Alaska will benefit by a transfer of maintenance responsibility to the COE and Hyder will benefit by properly funded maintenance.

NOW THEREFORE BE IT RESOLVED that the Hyder Community Association request $700,000 from the State of Alaska for the match funding for the redesign of the Hyder Small boat Harbor.

Adopted By the Hyder Community Association Board of Directors on February 1, 2022

VOTE: yea 6 nay Ø

Witness: Caroline Stewart - VP

for Paul M Larkin, President

Attest: Carol Denton

Carol Denton, Secretary

December 2021
Pacific Ocean Division
Alaska District

HYDER NAVIGATION IMPROVEMENTS
SECTION 107 PROJECT FACT SHEET

1. Project Name: Hyder Section 107 Navigation Improvement Project (P2# 484472)

2. Army Corps of Engineers District and Participating Sponsor:

a. Corps District and POC: Curtis Lee (907-753-2539; Curtis.D.Lee@usace.army.mil), Project Manager, Alaska District

b. Sponsor and POC: Kirk Miller (907-465-1215; kirk.miller@alaska.gov), Preconstruction Engineer, State of Alaska, Department of Transportation and Public Facilities

3. Congressional Delegation:

a. House – Don Young (R-AK)

b. Senate – Lisa Murkowski (R-AK), Dan Sullivan (R-AK)

4. Location: The town of Hyder is located at the head of Portland Canal, a 96-mile-long fjord which forms a portion of the U.S./Canadian border. Hyder is 75 air miles from Ketchikan. It is the only community in southern southeast Alaska accessible by road; the only road into Hyder runs through Stewart, British Columbia, just two miles across the Canadian border (Figure 1 and Figure 2).

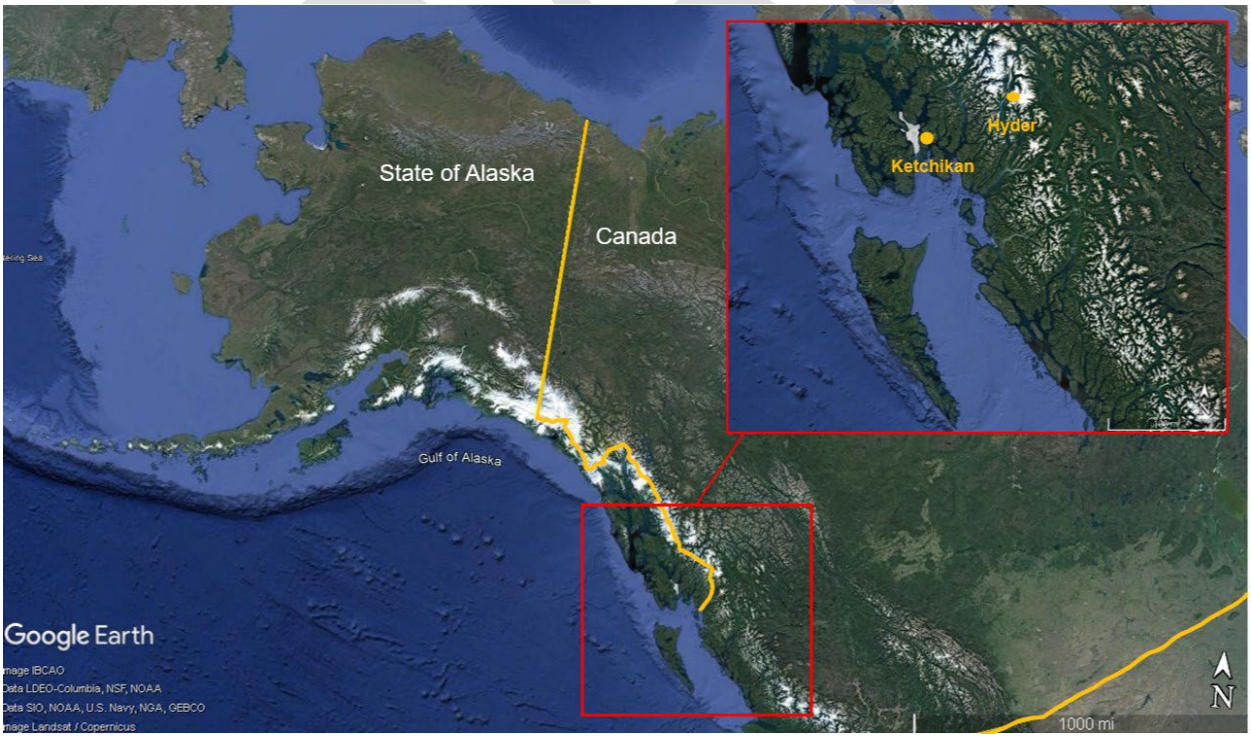

Figure 1. Location of Hyder, Alaska

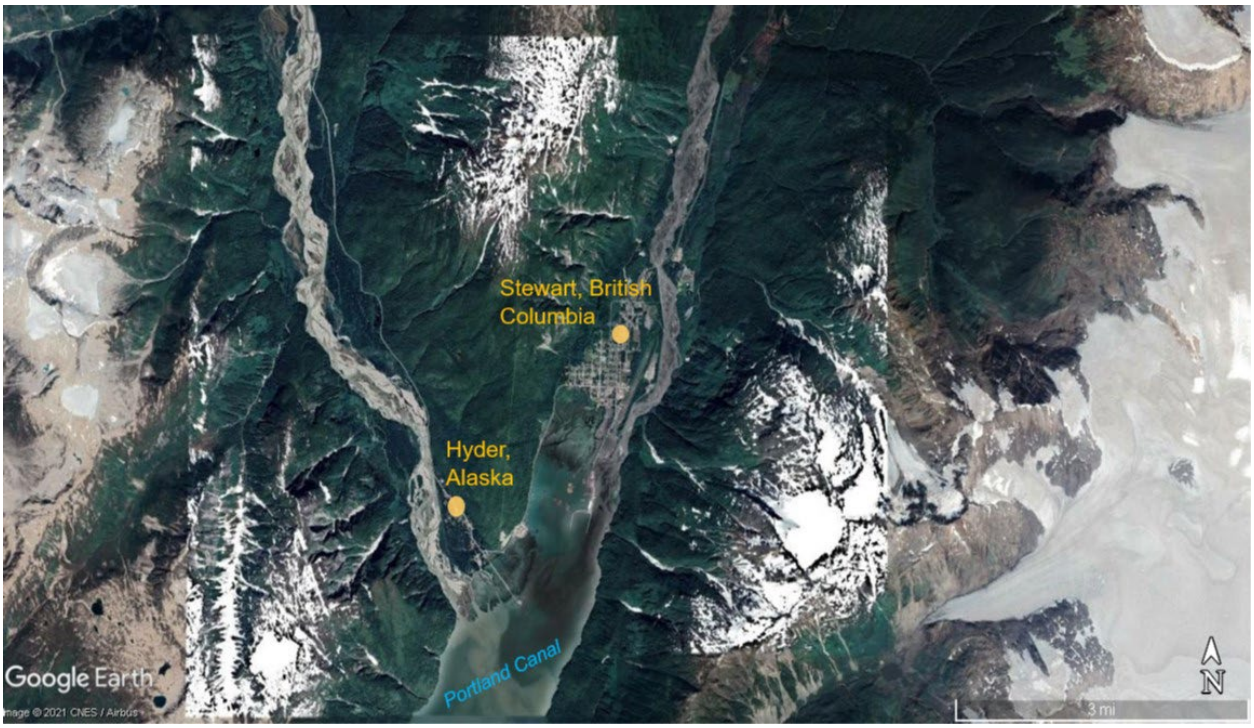

Figure 2. Hyder, Alaska proximity to Stewart, British Columbia on the Portland Canal

5. Problem: The Hyder Harbor is sited in an alluvial fan at the mouth of the Salmon River. Shallow depths are impacting the efficient use of portions of the harbor at Hyder. Vessels often ground during low tide, and portions of the harbor are inaccessible. The shallow depths are due to sediment movement and deposition within the alluvial fan.

The Hyder Harbor is not a Federally constructed harbor with a Federally authorized project depth. The Harbor was constructed by the State of Alaska, Department of Transportation & Public Facilities (AK DOT&PF) in 1981 and was dredged to a depth of -10 feet Mean Lower Low Water (MLLW) (1981 dredge plans shown in Figure 3). The Harbor was dredged to -10 ft MLLW again in 2003 under a Department of Transportation contract (Figure 4). An aerial view of the harbor prior to the 2003 dredging was completed is shown in Figure 5. Figure 5 also shows a float plane dock that was constructed at the end of a trestle system built in 1975. In 2003 AK DOT&PF relocated the float plane dock to the current harbor, due to its dilapidated condition the trestle system was removed by the State in 2012. A USACE site visit in 2019 indicated that the harbor was again filled with sediment and needs dredging. Sediment is visible in a 2021 Google Maps aerial image of Hyder Harbor (Figure 6).

Analyses conducted during the Feasibility Phase will help determine the volume of sediment that has collected in the harbor and possible solutions to reduce the dredging frequency. According to the local sources sedimentation issues began to affect harbor accessibility after approximately three years from the time of each dredging occurrence.

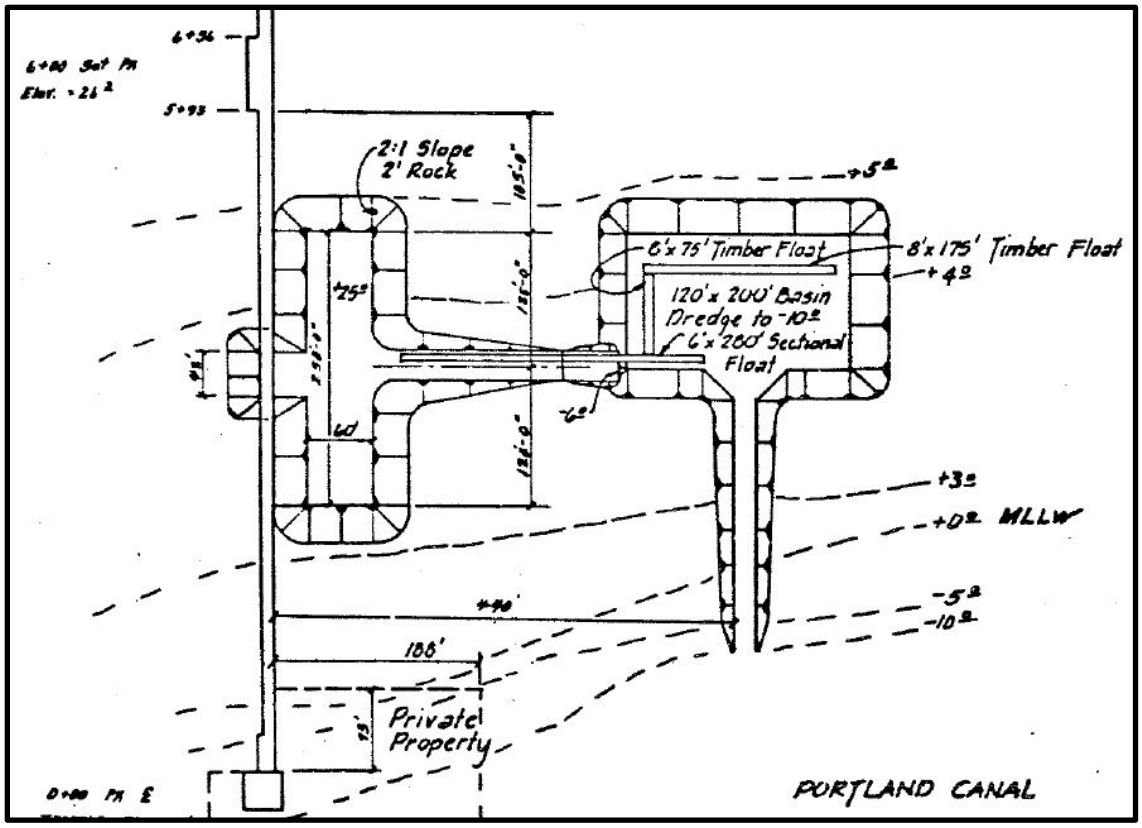

Figure 3. 1981 Plans for Harbor Dredging, prepared by the Alaska Department of Transportation

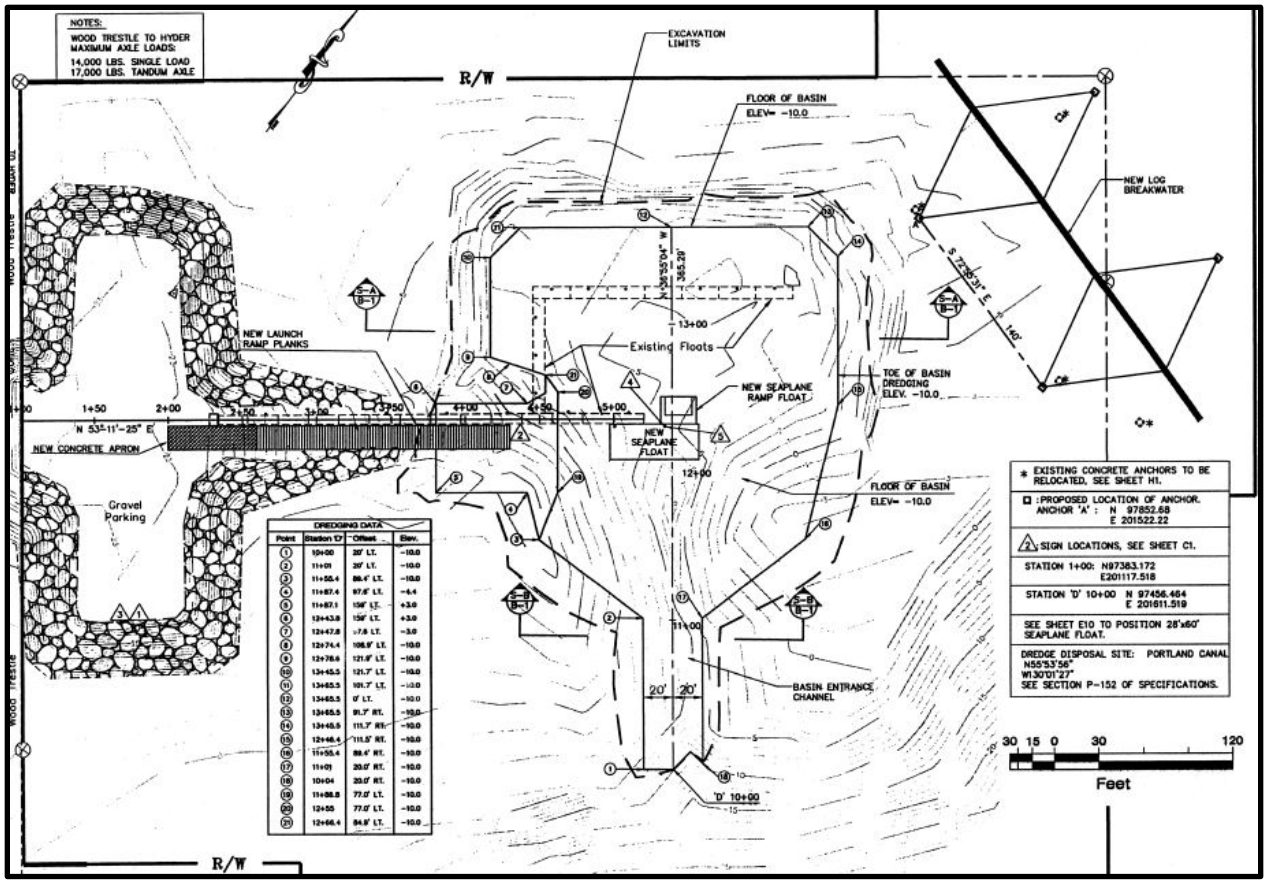

Figure 4. 2003 Plans for Harbor Dredging, prepared by the Alaska Department of Transportation

Figure 5. 2003 Hyder Harbor before dredging with location of former float plane dock

Figure 6. 2021 Hyder Harbor

6. Alternative Plans Considered:
Initial alternatives considered are dredging and/or harbor relocation. Alternatives will be investigated in more detail during the Feasibility Phase to determine if a Federal interest exists to develop navigation improvements at Hyder.

- **Dredging:**

Harbor dredging has been completed twice, once when it was constructed in 1981 and again in 2003. Recurring maintenance dredging is required to keep the harbor open. Since the Harbor was not constructed by the U.S Army Corps of Engineers, the Corps has no jurisdiction in providing any maintenance for the harbor.

- **Relocation of the harbor to deeper water:**

According to local sources there is deep-water where the former float plane dock was located (Figure 5, extension from gravel pad). NOAA's nautical chart 17425 indicates that the water depth is approximately 140 feet just beyond the mudflat (Figure 7). Extending the pier and relocating the harbor floats to the area of deeper water would provide adequate depth for the current fleet at all tide cycles with no dredging required. While the 140-foot depth may be too deep, there may be an intermediate depth that is shallower than 140 feet, but naturally deeper than where the harbor is currently located. If such a location is suitable for the floats to be relocated, the wave climate would need to be evaluated to determine if a wave protection structure would be needed. Most likely a floating breakwater could be used (based on the information provided by the locals).

Floating breakwaters have successfully been constructed in approximately 80 feet of water in Unalaska (Carl E. Moses), and Ketchikan (Bar Point). To determine the suitability of deploying similar floating breakwaters at Hyder, evaluation of bathymetry and foundation material is necessary to determine if conditions are suitable.

A hydrographic survey is also needed to determine if an intermediate depth for relocation is available. An analysis of the wave climate is needed to determine the type and location of a wave protection structure required, and a geotechnical analysis is needed to determine the viability of the placement of a wave protection structure.

According to Hyder residents, we currently know the summer wind is predominantly out of the south:

90% 0 to 1 foot,
6% 1 to 2 foot,
3% 2 to 3 foot,
1% 3 to 4 foot,
About every 5 years, 5 to 6 foot.

In the winter the wind is predominantly out of the north with 3-foot waves being typical. Residents also noted that on rare occasions the head of Portland Canal can freeze over.

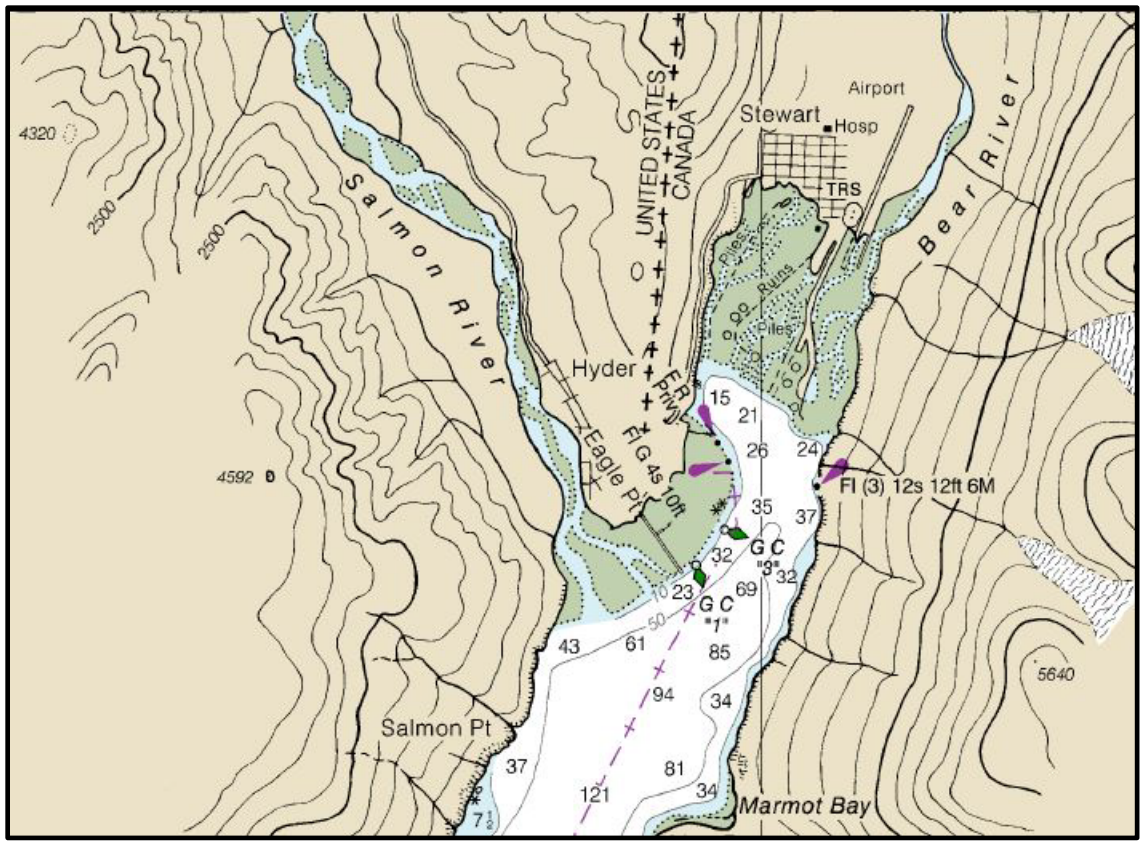

Figure 7. Section of NOAA Chart 17425 showing the alluvial fan where the Hyder Harbor is located and proximity to deep water. Soundings are in fathoms.

- **Description of likely recommended plan:**

The likely recommended plan is relocation of the harbor to deeper water (Figure 8). After assessing the cost and required frequency of dredging the PDT determined that relocating the harbor to deeper water would be more beneficial over the lifespan of the project.

Figure 8. Depiction of likely proposed project at Hyder Harbor (Conceptual graphic is not to scale)

The project assumes two 21'X 300' floating breakwaters will be used to protect a 300' walkway that gives access to floats. A Rough Order Magnitude (ROM) class 5 cost estimate was produced by USACE Cost Engineering. Including contingencies, the total project cost is estimated to be $8.4M. Table 1 below summarizes the project cost estimate for the likely recommended plan.

Table 1. Class 5 Rough Order Magnitude (ROM) Cost Estimate

Feature Account/Item Description	UOM	Quantity	Unit Cost	Total Cost
Mob/Demob	EA	1	$250,000	$250,000
Survey	Acre	30	$3,360	$100,800
Walkway	SF	1,800	$267	$480,600
Floating Breakwater	SF	12,600	$250	$3,150,00
Floats	SF	5,000	$71	$355,000
Contingency (Class 5 Estimate)			25%	$1,084,100
Estimated Construction Cost (includes profit and overhead)				$7,317,675
S&A (Assume 7.5% of the ECC)			7.5%	$548,826
PED (Planning, Engineering, Design)				$500,000
Total Project Cost				**$8,366,501**
Rounded Total				**$8,400,000**

ROM Assumptions:

1. Mob/Demob: Based on Juneau O&M Dredging contract mob/demob that assumed Seattle to Juneau/Juneau to Seattle mob/demob $250,000 each way
2. Walkway: assume each 6' wide X 10' long section will include 6" x 4" deck, metal frame, floating on water held with piling
3. Walkway: 300' x 6' = 1800 SF
4. Floating Breakwater: Two breakwaters at 21' X 300' = 12,600 SF. $250.00/SF based on page 136/154 (Bar Point Harbor Floating Breakwater Replacement - Vendor Pricing Summary) Ketchikan Bar Point Harbor Breakwater Design Report 80% submittal from April 2021
5. Floats: Assume 10' wide by 500' long
6. Cost are ROM based on judgement and would be considered a Class 5 Estimate

7. Economic Analysis

7.1. Vessel Delays

Without regular dredging, harbor conditions under a future without project (FWOP) scenario would lead to frequent delays associated with draft restrictions for the fleet of 5-10 boats that regularly utilize the harbor. The delay of these vessels costs time, fuel, and increased maintenance while vessels must wait in the channel until they are able to access the harbor at high tide. In addition to the fleet of vessels that use the harbor regularly, additional transient vessels are also expected to experience delays but less frequently. Given the small size of the fleet, slight variations in delay times and frequency would have a significant impact on a benefits analysis. Therefore, any benefits quantified via this method would have a high degree of uncertainty without additional analysis that is beyond the scope of the FID.

Figure 9. Current conditions at Hyder Harbor during low tide

Additionally, several other possible benefits have not been quantified for this FID level analysis, including those from the potential reintroduction of Hyder on the Alaska Marine Highway, maintaining community access to postal service deliveries, as well as the potential for increased gold mine production in the area. StrikePointGold is currently increasing production of its mining operations in the area and utilizes the Hyder Harbor when possible. With increased access to and from the mining operation, which is approximately 20 miles north, production and extraction from this mine is likely to increase. Additionally, potential benefits associated with tourism have not been accounted for, as a survey or focus group would be required to quantify recreational value.

Due to the uncertainty associated with a delay analysis at the FID level and the level of effort required to explore additional potential benefit streams, avoided delay costs and additional efficiencies that could be attributed to the proposed project are not quantified. Thus, the most reliable metric for economic analysis in this FID is the nullified dredging cost.

7.2. Avoided Dredging Analysis

To keep the existing small boat harbor fully operational in FWOP, maintenance dredging is required at 5-year intervals. Dredging costs are estimated to be $3.69 million per occurrence and would be incurred at a 5-year interval throughout the FWOP condition to maintain access for the fleet. In the proposed future with project (FWP) condition, these dredging costs would be

avoided entirely and are a benefit of the project. Assuming a 50-year period of analysis with a base year of 2025 for the start of benefits, a construction duration of 1 year and the FY22 federal discount rate of 2.25 percent, average annual equivalent (AAEQ) benefits of avoided maintenance dredging are $772,000.

7.3. Proposed Project Costs

Project cost for the proposed alternative is estimated at $8.4 Million, with estimated O&M costs of $400,000 at project years 20 and 40 for replacement of chains on the floating breakwater, along with $4 Million for replacement of floating breakwater floats at year 40. Utilizing the same 50-year period of analysis and federal discount rate that was used for the benefit annualization, average annual equivalent (AAEQ) costs for the proposed project are $353,000.

Table 2.Rough Order of Magnitude Economic Costs

Description	Cost
Project First Cost	$8,367,000
Interest During Construction	$105,000
Operations and Maintenance Costs	$2,063,000
Total Economic Cost	**$10,535,000**
AAEQ Economic Cost	**$353,000**

Note: Costs used in the economic analysis are discounted to a base year and amortized utilizing the Fiscal Year 2022 federal discount rate of 2.25% so these economic costs will differ from those presented elsewhere. Calculations for IDC based on 12 months for PED and a 12-month construction period.

7.4. Summary of Economics

The AAEQ net benefits from the proposed project are $419,000 resulting in a Benefit Cost Ratio (BCR) of 2.2.

Table 3. Summary of Economic Costs and Benefits

Average Annual Economic Benefits	$772,000
Average Annual Economic Costs	$353,000
Net Annual Benefits	$419,000
BCR	**2.2**

8. As of the date of this fact sheet are there any policy waivers required, including a waiver for deviation from the NED Plan? None at this time.

9. Key Milestones:

HQUSACE concurrence: January 2022
Execute FCSA: June 2022
Complete Feasibility Study: December 2023
PPA Execution: June 2024

Contract Award: December 2024

10. Authorization, appropriations act, or report language: The investigations summarized in this report will be undertaken through the authority of Section 107 of the River and Harbor Act of 1960 (Public Law [P.L.] 86-645), as amended (33 U.S.C. 577). The requirements for review and funding are less stringent than for projects specifically authorized by Congress. Other legal requirements still apply, such as those in the National Environmental Policy Act of 1969 (P.L. 91-190), as amended, and various other laws and associated Federal regulations concerning environmental quality.

11. Financial Information:
Feasibility Study Costs: $1,339,800 (Federal Share: $719,000) (Note: The initial $100,000 of the Feasibility Phase is federally funded with the remaining balance cost shared 50/50 with the non-Federal Sponsor. The remaining funds from the initial $100,000 will be utilized for scoping. FCSA negotiations, POD comments and contingency.) As confirmed in a Letter of Intent dated December 1, 2021, the State of Alaska, Department of Transportation and Public Facilities is aware of the study requirements and are in the process of acquiring funding for the study.

Hyder CAP 107 Budget	
Project Management	$100,000
Project Formulation	$100,000
Environmental Resources	$50,000
Economics	$75,000
Branch Oversight	$30,000
Civil Works Subtotal	**$355,000**
Hydraulics and Hydrology	$250,000
Cost Engineering	$50,000
Geomatics	$167,000
Geotechnical	$295,000
Branch Oversight	$21,000
Agency Technical Review	$80,000
Subtotal	**$1,218,000**
Contingency (10%)	$121,800
Total	**$1,339,800**
Minus Initial Federal Funds	$100,000
Sponsor Share	**$619,900**
Federal Share	**$619,900**

12. Complete Funding History by FY

	Amounts Specified ("Named") By Congress	Net Allocations for all Fiscal Year
FY 20	**$0.00**	**$50,000.00**
FY21	**$0.00**	**$50,000.00**

13. Supplemental Information:

a. **Establishment of General Navigation Features (GNFs) and Local Service Facilities (LSFs):** Since Hyder Harbor is not a Federally maintained harbor constructed or authorized by the Federal government, GNF and LSF features have not been clearly identified. The GNF/LSF areas of responsibility will be established during Feasibility Phase.

b. **Environmental Settings:** Preliminary assessments have indicated….As the environmental impact of the proposed project is expected to be minimal, an Environmental Assessment (EA) will be prepared to meet National Environmental Policy Act (NEPA) requirements.

c. **Cultural Resources:** The proposed study for improvements at the port in Hyder may have impacts on known historic properties, depending on the alternative chosen during a Feasibility Study. A brief overview of the Alaska Heritage Resources Survey (AHRS) shows that the community of Hyder has 66 known cultural resources and historic properties spanning the town; at least two of these historic properties would likely be within the proposed project area. A previous non-USACE project at the port in Hyder required mitigation of alterations to the original port structure. During the Feasibility Study for the proposed project the USACE would determine the impacts of alternatives on the historic properties within the project area and produce an assessment of effect. If the proposed project is found to adversely affect these historic properties during the study, the USACE will coordinate with the State Historic Preservation Officer and any other appropriate stakeholder to identify appropriate mitigation to resolve the adverse effect.

d.

e. **Economic Analysis:** For the purpose of Federal Interest Determination, readily available information and anecdotal information provided by harbor users and local entities was utilized to develop our assumptions. This information and our assumptions will be verified during the Feasibility Phase of the study.